Academic, Behavioral and Social Intervention Strategies for Elementary Children with Autistic Spectrum Disorder

By

Kristin Flora

In Partial Fulfillment of the Requirements of the Degree

of Master of Education, Counseling

Committee Members:

Christine Cook, Ph.D.

Joanne Healy, M.Ed.

Brenda Henze-Nelson, M.Ed.

University of Alaska

Fairbanks, Alaska

December 2013

Abstract

Students with Autism Spectrum Disorder (ASD) experience academic, behavioral and social challenges that can interfere with their ability to participate fully in the school environment. School districts are legally mandated to provide services to students with disabilities. This paper provides definitions of ASD, addresses some of the diagnostic testing instruments, describes theoretical approaches, and looks at three evidence-based intervention strategies that could be utilized by a school counselor and staff members to work effectively with students with autism. The first is applied behavioral analysis (ABA) which centers on teaching small, measurable units of behavior systematically. The second intervention is assistive technology (AT) which is comprised of devices that allow a student full access to their learning environment. This can be accomplished through the use of computers (high) or a modified chair (low). The third intervention is Positive Behavioral Intervention Supports (PBIS) which incorporates a school-wide approach to fostering a healthy and positive environment for students to role-model and practice appropriate behavior for their peers and adults. The final piece included is a district-wide school in-service to provide information to staff about local, state and national resources available to them.

Table of Contents

Behavioral and Social Intervention Strategies for Elementary Children with Autism Spectrum Disorder

The Autism Society of America (2003) notes that Autism Spectrum Disorder (ASD) is one of the fastest growing developmental disabilities in the United States which underscores the need to provide best-practices for educating students with ASD. School personnel such as teachers, paraprofessionals and school counselors are tasked with the responsibility of educating and providing intervention strategies for students with ASD within the public school environment. School personnel must be familiar with current best practices for identifying and working with children with ASD, however many do not have any formal training. Thus, the school counselor can play a critical role in assisting the child, and school personnel to gain a basic understanding of the disorders and possible interventions.

According to a National Health Statistics Report released by the Centers for Disease Control (CDC) on March 20, 2013, the prevalence rates of American children with Autism Spectrum Disorder has increased significantly since 2007. It is now estimated that as of 2012, 1 in 88 children (1 in 54 boys, 1 in 252 girls) ages 6 to 17 has some form of autism (CDC, 2013). Stephen Blumberg, a senior scientist at the CDC's National Health Statistics (NHS) attributes the principle cause in the rise in the prevalence of autism to improved diagnoses and parental reporting, particularly in older children. Due to the increasing number of students being diagnosed with ASD, the CDC postulates that there needs to be a coordinated service system that will provide for the health and well-being of all children and families with ASD regardless of socioeconomic and ethnic backgrounds.

Providing special education and related services for students with ASD is a challenge for school districts across the nation. The challenge for any district is to create viable educational

programs and services for students with ASD consistent with the Individuals with Disabilities Education Act Amendments of 2004 (IDEA) and state law. In doing so, the student will be provided a free appropriate public education (FAPE) that will meet their unique educational needs in the least restrictive environment (LRE) (Harley & Redmond, 2010).

Guldberg (2011) states that best autism practice can broadly be defined as identifying, understanding, and breaking down obstacles that interrupt the ability of a student to participate and belong. She suggests that inclusion requires a transactional approach (bidirectional, reciprocal interaction between the child and his/her environment) to educating children with autism, thus adjustments to the learning environment and the way staff interacts with the student needs to be flexible. The students, staff and parents could reap the benefits of a school team working collectively in a cohesive and holistic manner to provide research-based programs for students on the autism spectrum.

The research for this project answers the following question: what behavioral or social intervention strategies available in Ketchikan, Alaska provide the most effective outcomes for elementary age students (4-12 years old) with Autism Spectrum Disorder? According to the American School Counseling Association (ASCA) (2012) school counselors are tasked with the responsibility to help facilitate a positive learning experience for students with autism through advocacy, transition planning, behavior modification, making referrals to specialists, working as part of an interdisciplinary team, teaching social skills and serving as a consultant to parents and staff. Layne (2007) states that school counselors play a critical role in providing support to families, friends and siblings of students who have been diagnosed with autism. In addition, children with autism generally require intensive behavioral and/or educational support, often working with a number of specialists to coordinate and develop behavioral and educational

goals. Special Education teacher Debbie Christensen (with 20 years experience working with students with ASD) suggested the target audience of this research should range from educational staff such as paraprofessionals, occupational therapists, teachers and school counselors to community members, students and parents as each stakeholder has a vested interest in promoting the academic, behavioral and social outcomes of students with students with ASD (D.Christensen, personal communication, March 6, 2012). The three specific interventions that will be discussed are Applied Behavioral Analysis (ABA), Assistive Technology (AT), and Positive Behavioral Intervention Supports (PBIS). These interventions were selected due to the strong evidence-based practices, a long history of successful implementation and ease of use by staff and students.

The literature review will discuss the need to teach appropriate social skills to facilitate academic learning, and behavioral and social interactions amongst peers and staff to promote autonomy.Special Education teacher Debbie Christensen states that a student with ASD may perseverate on a task or object and will typically prefer to stick to a set of behaviors as they are resistant to major and minor change impacting their success academically, behaviorally and socially in a school setting (D.Christensen, personal communication, December 10, 2012). According to Christensen, the sheer number of possible interventions for parents to consider is overwhelming and confusing. School counselors are in a unique position to implement curriculum and guidance lessons intended to increase parent and staff awareness of available resources through in-service trainings and parent workshops.

The interventions discussed in this paper will suggest ways that a school counselor can implement a comprehensive behavioral and social intervention program in all school settings such as the classroom, hallways and playground from preschool to sixth grade. A quick

reference guide that includes information on the implementation of the interventions has been devised to serve as a resource for school counselors with a brief description outlining the characteristics and definitions associated with ASD.

Autism Spectrum Disorder

Autism is a group of developmental brain disorders, collectively called autism spectrum disorder (ASD). The term "spectrum" refers to the wide range of symptoms, skills, and levels of impairment, or disability, that children with ASD can have. Some children are mildly impaired by their symptoms, but others are severely disabled (National Institute of Mental Health, 2013). According to the University of Iowa Regional Autism Services Program Child Health Specialty Clinic (2013), the term “autism” means a developmental disability significantly affecting verbal and non-verbal communication and social interaction, generally evident before age three that adversely affects educational performance (p.1). ASD was diagnosed according to guidelines listed in the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition - Text Revision* (DSM-IV-TR) (APA, 2000) the guidelines are as follows:

> To receive a diagnosis of ASD, the DSM-IV-TR (APA, 2000) codes Autistic Disorder 299.00 as total of six (or more) items:
>
> Qualitative impairment in social interaction, as manifested by at least two of the following:
>
> 1(a) marked impairment in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction, (b) failure to develop peer relationships appropriate to developmental level,(c) a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by lack of showing, bringing, or pointing out objects of interest), (d) lack of social

> or emotional reciprocity: 2. Qualitative impairments in communication as manifested by a least one of the following: (a) delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime), (b) in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others, (c) stereotyped and repetitive use of language or idiosyncratic language, (d) lack of varied spontaneous make-believe play or social imitative play appropriate to developmental level (APA,2000,pp.59-90).

The DSM IV-TR (APA, 2000) is currently utilized in the Ketchikan Gateway Borough School District (KGBSD) for diagnosing students with autism as the transfer over to the DSM-5 is eventually implemented into the assessment process. According to the American Psychiatric Association (APA) (2013), Autism Spectrum Disorder (ASD) is a new DSM-5 name that reflects a scientific consensus that four previously separate disorders are actually a single condition with different levels of symptom severity in two core domains. ASD now encompasses the previous DSM-IV autistic disorder (autism), Asperger's disorder, childhood disintegrative disorder, and pervasive developmental disorder not otherwise specified. In DSM-IV, symptoms were divided into three areas (social reciprocity, communicative intent, restricted and repetitive behaviors). The new diagnostic criteria have been rearranged into two areas: 1) social communication/interaction, and 2) restricted and repetitive behaviors. The diagnosis will be based on symptoms, currently or by history, in these two areas.

According to the National Institute of Mental Health (NIMH, 2012), children with ASD do not follow typical patterns when developing social and communication skills. Symptoms vary from child to child, but in general they fall into three areas: social impairment, communication

difficulties and repetitive and stereotyped behaviors. Parents are usually the first to notice unusual behaviors in their child as certain behaviors become more noticeable when compared to other children of the same age.

Diagnosis of Autism Spectrum Disorder

Early identification of ASD is a top priority for researchers in the developmental disabilities field (Mattson, Fodstad, & Dempsey, 2009). Intervention at the earliest possible age is beneficial to increasing a child's abilities and skills while concurrently decreasing maladaptive behaviors. Matson and Sipes (2010) state that most testing instruments for the diagnosis of ASD have been aimed at children 5 years and older with sporadic attempts to adapt these instruments to very young children. The early screening and diagnosis of children with ASD can be viewed within the context of refining and modifying current assessment measures to develop testing instruments for children 18-48 months. Empirical research studies on this aspect have been limited.

Parents or caregivers are often the first to notice a developmental discrepancy with their children. The first step in the assessment process is to interview the parents to obtain a social, developmental and medical history regarding the child's current level of functioning (Indiana Resource Center for Autism, 2013). Questions should be aimed at determining the onset of communication problems, awkward social interactions, unusual play, or hyper- or hypo sensitivity to sensory stimuli.

To make a diagnosis of ASD, a multidisciplinary assessment procedure that includes detailed developmental history and description of current behaviors, assessment of cognitive and language abilities, and functioning in a variety of setting is required by the DSM-IV-TR (Le Couteur, Haden, Hammal, & McConachie, 2008). The information needs to be combined into a

consensus opinion utilizing a combination of clinical judgment and standardized instruments so that specially trained physicians and psychologists can administer autism –specific behavioral evaluations.

According to Le Couteur et al. (2008), three of the most widely used diagnostic instruments used for this purpose are the Autism Diagnostic Interview-Revised (ADI-R) the Autism Diagnostic Observation Schedule (ADOS), and the Gilliam Autism Rating Scale (GARS). ADI-R is an investigator-based interview designed to provide a framework of the developmental history for a differential diagnosis of Pervasive Developmental Disorders and information about current functioning for individuals throughout the course of their lifespan.

The ADI-R is a summary diagnostic algorithm that distinguishes between Autism and not Autism. It is comprised of five sections: opening questions, communication, social development and play, repetitive and restricted behavior, and general behavior problems (Indiana Resource Center for Autism, 2013). It consists of 111 questions for an intensively trained interviewer to conduct and usually takes approximately 1-hour to administer with additional time required for scoring (Le Couteur, Lord, & Rutter, 2003).

The ADOS is an approximately 40 minute standardized semi-structured play and activity based assessment that provides through observation standard contexts of social behavior, communication, play and restricted behaviors in individuals suspected of having ASD (LeCouteur et al., 2008). The observation is completed by a clinician with a masters or doctorate-level education and specialized training. It is comprised of 10 sets of materials and play activities in four modules designed for a particular developmental age and language ability ranging from nonverbal to fluent.

The ADI-R and the ADOS are considered the most recognized autism scales at this point in time as they are keyed to PDD in the DSM-IV-TR manual (Matson & Sipes, 2010). The major strength of the ADI-R and ADOS is that they are well established, broadly used measures that were developed to be used in combination to contribute to a valid diagnosis.

Sikora, Hall, Hartley, Gerrard-Morris & Cagle (2008), state that the Gilliam Autism Rating Scale-2 (GARS-2) is a 56 item norm referenced screening instrument used for the assessment of individuals ages 3-22 who have severe behavioral problems that may be indicative of autism. The GARS-2 gathers information about specific characteristics typically noted in children with autism spectrum disorders in three areas (stereotyped behaviors, communication, and Social Interaction) and it contains a developmental history. The GARS-2 was normed entirely of individuals diagnosed as autistic. Standard scores and percentiles are provided and the likelihood of autism can be determined. In a school setting, it is used to help educational teams determine whether a child may meet the state educational criteria for receiving special education services under the Autism Spectrum Disorder category.

According to the Association for Science in Autism Treatment (ASAT) (2013), research indicates that the earlier a child gains access to quality behavioral treatment, the more likely they are to have a better long-term outcome. Individualized education and social goals can be determined by parents and staff as the child enters into the school system, then modified each school year. Therefore, as stated previously, early identification is key.

Literature Review

Kimball (2011) notes that children with ASD present challenges to the education system as they require specific skills from school staff in order to attain a proper and complete

education. They possess different strengths and abilities, thus their educational programs should be tailored to fit their academic, behavior and social goals.

The literature review will cover interventions that can be used with students with ASD in the school environment by counselors, paraprofessionals, teachers and other staff members. These interventions can facilitate an increase in the behavioral and social acumen by teaching students new strategies to adopt. According to Bellini and McConnell (2010), articles or books that discuss the topic of autism stem from the perspective of the inherent weaknesses or deficits that befall individuals on the autism spectrum. Rarely do they illuminate the strengths of the individuals unless they possess savant skills.

Strengths Based Perspective

The counseling field shifted from assessing clients and students from the traditional medical model, focusing on pathology to the SBP model that seeks to focus on the student's strengths and abilities, rather than weaknesses (Weishaar, 2010). According to Cosden, Koegel, Koegel, Greenwall, and Klein (2006), an SBP assessment such as the Behavioral and Emotional Rating-2 (BERS-2) encourages educators and other professionals to establish goals that go beyond repairing a child's deficits to helping the child and family develop a higher quality life.

According to Epstein and Sharma (1998):

> Strength-based assessment is defined as the measurement of those emotional and behavioral skills, competencies, and characteristics that create a sense of personal accomplishment; contribute to satisfying relationships with family members, peers, and adults; enhance one's ability to deal with adversity and stress; and promotes one's personal, social, and academic development. (p.3)

The American Academy of Pediatrics (2013) states that SBP uses the asset model which gives a broad perspective on development and encourages a family's growth and competency building across time. The process is to first identify a child's strength; once it is identified give feedback to the child as reinforcement. If the feedback is not positive, still give feedback, but discuss ways to acquire positive change. For example, if a child masters a new skill, shares with others or exhibits independent decision-making, acknowledge those accomplishments. Third, if a behavior change is needed, utilize a shared-decision making strategy to encourage the change.

IDEA requires public schools to assure that parents of student with disabilities have the opportunity to participate in an Individual Education Plan (IEP) meeting (Weishhaar, 2010). The IDEA principle of parent participation means that parents have meaningful and full participation as active partners in the decision-making process, goal planning and development of their child's IEP. Parents have the right to review school records, participate in meetings and give informed consent.

Theoretical Approach

Henderson and Thompson (2011) define cognition as the methods people use to understand their environment and themselves, such as their perceptions, sensations, learning, memory, and other psychological processes. Cognitive Behavioral Therapy (CBT) focuses on a person's thinking as the primary path to change. According to Lickel, McClean Jr., Blakely-Smith and Hepburn (2012), children with (ASD) experience a higher rate of comorbid mental health problems, including anxiety, depression, attention deficit hyperactivity disorder (ADHD), and disruptive behavior disorders than children with other communication disorders. The National Association on Mental Illness (NAMI, 2013) states that CBT is a form of treatment that focuses on examining the relationships between thoughts, feelings and behaviors. The goal of

CBT is to teach patients/students that while they cannot control every aspect of the world around them, they can take control of how they interpret and deal with things in their environment.

Rotheram-Fuller and MacMullen (2011) conducted a review on the existing literature on CBT for children with ASD highlighting current recommendations for its use in school practice. The authors note that increasingly, anxiety is being examined as an underlying issue to the social behavior of children with ASD. Although anxiety is often identified as a problem within the school setting, there are few interventions designed to address anxiety within that context. Intervention strategies that are utilized the most are pharmacological in nature and do not address the cognitive or behavioral manifestations of anxiety, which are the common complaints of children with ASD.

According to Miller, Short, Garland and Clark (2010), the school system is primarily concerned about the academic education of children. Teachers, paraprofessionals and speech pathologists have little training in dealing with emotional and social problems associated with children with autism. School counselors can provide the social, emotional curricula due to their educational background in psychoeducational, ethical and cultural counseling. Wood et al. (2009) suggest that counselors can develop and implement in the classroom CBT modalities that promote reciprocal conversation skills in the actual settings where social deficits are exhibited. Teachers, paraprofessionals and parents can be trained on simple coaching procedures that promote the child's use of reciprocal conversational skills (e.g., posing questions) immediately preceding actual social interactions (where is the bathroom, can I have the book?).

Wood et al. (2009) piloted a study testing the effect of CBT on parent-reported autism symptoms. Nineteen children (7–11 years old) with autism spectrum disorders and an anxiety disorder were randomly assigned to 16 sessions of CBT or a waitlist condition. The CBT

program emphasized in vivo exposure (vivo teaching is done in simulated situations and extends into natural settings in the community) and supported by parent training and school consultation to promote social communication and emotion regulation skills. Parents completed a standardized autism symptom checklist at baseline and posttreatment/postwaitlist and 3-month follow-up assessments. CBT outperformed the waitlist condition at posttreatment/postwaitlist on total parent-reported autism symptoms (Cohen's effect size=.77). Treatment gains were maintained at 3-month follow-up according to the authors of the study.

Rotheram-Fuller and MacMullen (2011) state that:

> CBT is an educational model that has been widely used to treat anxiety, mood, and psychotic disorders within the general population. A fundamental tenet of CBT is that it addresses not only the behavioral manifestations of problems, but also seeks to understand and remit the underlying cognitions that lead to those behaviors. There are generally six main components to CBT, including: (1) psychoeducation, (2) somatic management, (3) cognitive restructuring, (4) problem solving, (5) exposure, and (6) relapse prevention that can all be introduced through multiple methods. CBT addresses the cognitive components of presenting problems rather than focusing exclusively on behavioral interventions. (p.1)

CBT is one of the chosen methodologies employed by the Ketchikan Gateway Borough School District (KGBSD) to address the needs of students along the Autism Spectrum. The use of concrete lesson plans with objectives, goals, performance criteria and evaluation provide teachers, staff and school counselors with measurable data to use in further academic and social skill guidance lessons.

Social Acquisition Intervention Methods

School counselors have the responsibility to work "with all students, especially those who are considered 'at-risk' and those with special needs", (ASCA, 2012, p. 1). According to Studer and Quigney (2003), counselors have traditionally entered a school setting to assist students with post-secondary training and testing at the high school level and guidance lessons at the elementary level however, professional and legal mandates require school counselors to work with all students, and many educators question whether students with special needs receive the same amounts of assistance as their non-disabled counterparts.

School counselors are in a unique position to provide academic, behavioral, educational, and emotional support to students, staff and parents through implementing interventions that can increase social skills while decreasing behavior problems. Academic and behavioral intervention modalities of ABA, AS and PBIS will be reviewed. The interventions are aligned to the four components of the ASCA (2012) model of guidance, responsive services, curriculum and system support. Interventions are evidenced-based, can be administered on an individual or school-wide basis and are cost-effective.

Applied Behavioral Analysis (ABA). According to Adrienne Clark special education teacher, KGBSD has limited resources available to provide educational, legal, crisis management or training opportunities to increase teacher's knowledge about students with autism. Services available to parents, staff and students is a patchwork of community agencies, behavior aides, the sporadic visits by the Special Education Service Agency from Anchorage, Alaska (SESA), and school psychologists. (A. Clark, personal communication, July 12, 2013). Applied Behavioral Analysis (ABA) is the intervention program that is utilized in the district to work with students

along the ASD spectrum, fetal alcohol spectrum disorder (FASD) and students with cognitive impairments such as Down's Syndrome. The program is called the Star Autism Program.

Schoen (2003) notes the historical origins of ABA stem from laboratory experiments and trials on human beings in what was once referred to as the severely retarded range of functioning. (The current terminology is intellectually disabled). After the technique was used successfully in a clinical setting, it was extended to include exceptional children of varying disabilities in the classroom setting. According to Arick et al. (2004), ABA is the process of systematically applying interventions based upon the principles of behavior theory to improve socially significant behaviors, including academics, reading, social skills, communication, and adaptive living skills while simultaneously evaluating whether any changes are a direct result of the ABA process.

Webber and Scheuremann (2008), state that ABA consists of principles and procedures that address a wide range of learners. ABA involves (a) applying these behavioral principles for instructional and behavior management purposes, and (b) evaluating whether interventions resulted in desired outcomes through the use of the A-B-C Model (antecedents, behavior and consequences). An antecedent is something that comes before a behavior, and may trigger that behavior. A behavior is anything an individual does. A consequence is something that follows the behavior Sugai et al., 2000).

Webber and Scheuremann (2008) suggest that teachers should plan a specific antecedent that will serve the purpose of eliciting the desired behaviors. For example, using picture schedules to cue students what they are to do during the day is an antecedent intervention. A stimulus control is a more precise use of antecedents for teaching and behavior management. According to Webber and Scheuremann, stimulus control (discriminative stimuli, or SD) refers

to a condition in which specific behavior(s) occur in response to a stimuli such as picking up the phone receiver and saying "Hello" (behavior) after hearing the telephone ring.

The ABA process includes conducting a baseline assessment (documentation of little or no progress before treatment) implementing a behavioral intervention such as discrete trial training (DTT) or pivotal response training (PRT), collecting ongoing data during intervention, making intervention changes based on data collected, reassessing the effect on the target behavior, generalizing the application of the target behavior, and repeating the process as necessary (Arick et al., 2004). The Indiana Resource Center for Autism (2013) states that the DTT method has four distinct parts: (1) the trainer's presentation, (2) the child's response, (3) the consequence, and (4) a short pause between the consequence and the next instruction (between interval trials). DTT is thought of as teaching "attempts" or "trials." An example of this technique is provided below:

> To teach Jane to identify the colors red and blue by asking her to point to red or blue cards placed on her desk. Each attempt or "discrete trial" might be scripted like this:
>
> 1. Teacher places one red card and one blue card on the table in front of Jane
> 2. The teacher then says, "point to red"
> 3. Jane responds by pointing to the red card
> 4. The teacher would say "That is right! Great job!"
> 5. There would be a very short pause before a new discrete trial would begin (Educate Autism, 2013a, p.1).

PRT is one of the best studied and validated behavioral treatments for autism. Derived from ABA, it is play based and child initiated (Autism Speaks, 2013). The goals include the development of communication, language and positive social behaviors and relief from

disruptive self-stimulatory behaviors. This is accomplished by targeting "pivotal" areas of a child's development. These include motivation, response to multiple cues, self-management and the initiation of social interactions (Pivotal response treatment for autism, 2013). An example of PRT would look like this:

1. Find a positive, fun activity that the child is interested in (i.e., playing on a swing).
2. Prompt the child for a response so that the teacher can evoke the desired behavior (i.e. stop the child from swinging, and then ask them "swing?").
3. If the child gives the desired response – "swing!" – then push them on the swing (positive reinforcement).
4. If the child does not give the desired response (i.e., no answer), then ask them again "swing?" until you achieve the desired behavior. The instructor should not give the child the desired behavior (swing them) unless the child correctly responds to the stimulus ("swing!"). Note that the instruction should be very clear, should be focused (no interruptions) and should be appropriate to what the child is doing. For example, you wouldn't stop the child on the swing and ask "cookie?" (Pivotal response treatment for autism, 2013, p.1).

ABA focuses on the principles that explain how learning takes place and uses an understanding of why behavior occurs to address a wide range of social issues, including helping individuals learn (Autism Partnership, 2013). ABA concentrates on increasing appropriate behaviors and decreasing inappropriate behaviors through a systematic approach of assessing the behavior that needs to be altered and then developing an intervention based on the identified behavior (Wallis & Goehner, 2006). ABA centers on teaching small, measurable units of behavior systematically. Each skill that the child with autism does not demonstrate (i.e., looking

at others, social interaction or spontaneous communication) is broken down into small steps (Maurice, Green, & Luce, 1996). Each step is taught by presenting a specific cue or instruction. Sometimes a prompt is used to get the child started such as a verbal prompt saying the entire phrase or word. For example, if a teacher is teaching the child to recognize and verbalize objects, give the instruction, "What is it?" while holding the object or card with a picture of object and then give the prompt, "Say Bear." A partial verbal fade back "say bear" and then if needed, "buh."

According to Clark (2010) the ABA format is based on Operant Conditioning:

> In Operant Conditioning, it is understood that there is a relationship between a verbal request or visual presentation (the stimuli) and a desired behavior that can be developed through reinforcing individual trials. Eventually, the discriminative stimulus (Sd) comes to indicate that a particular behavior is expected. If the child engages in the expected behavior, the reinforcement is provided. (p. 36)

The process of ABA is very systematic starting with an assessment of a child to ascertain the type of behavior modification required. Once the behavior is identified, intervention strategies are determined to fit the situation and then used to modify the behavior. Smith (2010) suggests that behavior is modified by the consequences that follow it and is strengthened and maintained by reinforcement. For example, raise your hand in class; get called on by the teacher. By being consistent and immediate, consequences can effectively influence behavior.

Maurice et al. (1996) state that the use of prompts should be used sparingly and faded (a technique where a stimulus is slowly removed from the environment) to avoid making the child dependent on them. Appropriate responses are followed by consequences that reinforce the

desired behavior. Teaching trials are repeated many times, initially in rapid succession, until the child performs a response readily, without adult-delivered prompts.

Assistive Technology (AT). According to Johnston, Beard and Carpenter (2007), assistive technology (AT) evolved for students with disabilities and stems from the Technology-Related Assistance for Individuals with Disabilities Act (Tech Act) of 1988 (Public Law 100-407). Johnson et al. state that there are three components to the definition of an AT device: What it is, how it is made, and its use. AT is defined as an item (e.g., a computer with speech recognition software), piece of equipment or product that has been acquired commercially, off the shelf modified (e.g., rice, sand), or used to increase, maintain, or improve functional capability for an individual with disabilities (visual schedule).

Bryant and Bryant (2007), state that AT is "the applications of science, engineering, and other disciplines that result in processes, methods, or inventions that support people with disabilities "(p.3). They further postulate that AT is really a concept, a perspective as it helps people with disabilities, their advocates and family members in making decisions about specific devices, services and adaptations to help facilitate independence. According to Adrienne Clark, special education teacher at KGBSD, accommodations allow students access to either high technology such as computers, iPads, laptops, and video, or low technology such as pencil grips, raised line paper or enlarged text while modifications such as dimming lights, removing distracting materials from a room or using a yoga ball to sit on in place of a regular chair(personal communication, July 15, 2013).These are all utilized with special needs students. Johnston, Beard and Carpenter (2007) note that AT makes it possible for students with disabilities to access the general education curriculum and be successful learners.

One of the newer developments in working with students with autism is the use of iPads as part of a visual schedule or an intrinsic reward for good behavior or completed tasks. Meadan, Ostrosky, Triplett, Michna, and Fettig (2011) denote that using visuals to structure the environment can help children with autistic spectrum disorder (ASD) function more independently in the natural environment. The use of fading prompts to promote independence through the use of iPads has been steadily growing over the last few years.

AT for communication includes dedicated augmentative communication devices (high) like Dynavox, Liberator II, and communication applications on the iPad and iPod touch: iCommunicate, iConverse, LearntoTalk, Speakit!, and others (Ennis-Cole & Smith, 2011). Sze (2009) identified a variety of assistive technology devices that can be applied to cognitive (reading, writing, and mathematics), visual, hearing, communication, and physical disabilities. According to Durand (2005), appropriate social skills can be learned through intensive intervention such as explicit instruction and video modeling (VM) which is used to teach students with ASD conversation and play skills, social communication, emotional perception, spontaneous requesting, social initiation, and perspective taking.

Children with ASD have difficulty in sustaining attention which is critical for students to attain and keep information. Patten and Watson (2011), purport that disturbances in attention may cause impairments that have a cascading effect for each of the core features of social, communication, restricted and repetitive behaviors and interest. AT devices are used help students focus on required tasks in the school environment.

As mentioned previously, according to Meadan, et al. (2011), researchers are investigating different intervention strategies to support the development and learning of children with ASD, and one methodology is using visual aides to structure the environment to help

children with ASD function more independently in the natural environment. They cite various literature that points to a correlation between visual supports to successfully assist students with ASD who struggle with social interaction. Several types of visual supports have proven effective and are typically available for home or school use such as ipads or paper-based schedules. A visual schedule helps children anticipate the order of their events and activities daily by illustrating what activity is taking place, what will happen next, when the activity is finished and identifying any changes to the schedule or routine. The use of this schedule helps promote independence by involving the student in the process of identifying an activity and physically touching or manipulating the visual schedule.

As part of their evidence-based program (EBP), Patten and Watson (2011) reviewed 12 therapeutic interventions to improve attention. They noted the study, intervention type, target behavior(s), duration, design and results. They further went on to describe intervention methods and strategies, general description of the method and whether it was established as an evidence-based program based on the National Standards Project, or an emerging EBP (National Autism Center, 2011). Accommodations to improve attention were listed in a table denoting the study, target behavior, design and results with statistical data to support their conclusions. They reported limitations in the existing literature and suggested further study be conducted. Bellini and McConnell (2010) illustrate one example of strength-based programming by presenting video-self monitoring (VSM) that focuses on what a child can accomplish rather than what they cannot. It allows them to imitate targeted behaviors by observing themselves successfully performing a desired behavior or task with a deluge of visual cues. Patten and Watson (2011) note that VSM is an EVB modality that can be used to reduce problem behaviors by enhancing skill performance and skill acquisition incorporating two intervention strategies: positive self-

review (PSR) and video feedback. The authors point out that the medical model forces practioners to focus exclusively on the deficiencies of children with ASD, rather than embrace the positive qualities they possess. They cite psychologist Howard Gardner's term of leveraging as the ability to recognize one's own strengths or unique talents and make use of them in our lives.

VSM is an intervention tool for students with ASD that capitalizes on their strengths and talents while portraying them as independent and capable. The benefits derived from the visual representation of a child successfully performing a desired task include improved attention span and self-efficacy, enhanced performance of skills and overall quality of life (Bellini & McConnell, 2010). The generalized positive outcome from this type of intervention could be easily incorporated into an elementary school setting. Staff could be quickly trained to use video cameras to document pre-planned interventions with students.

According to Bellini and McConnell (2010), a review of a student's Individual Education Plan (IEP) should be the framework the school team can use to outline the types of behavior and skills that they wish to teach the child. The VSM intervention involves recording the student performing a pre-determined prompted behavior, subsequently, the prompting is edited out so that the video reflects the student demonstrating the desired behavior. The next step is to incorporate other students and adults to be in the video with the student. The third step is to plan the production of the video, considering picture and sound quality, the use of prompting, what supports may be necessary to portray the student as independent and maintaining self-control.

Bellini and Akullian (2007) conducted a meta-analysis using VSM with children who have ASD. The results of the 23 peer-reviewed studies suggested that VSM are effective

intervention strategies for addressing behavioral and language functioning as well as social and functional skills.

According to Clark (2010), children with Autism tend to be poorly regulated, demonstrating rapid and unpredictable shifts in mood, frequent tantrums, aggressive acts and even self-injurious behaviors. School counselors may experience resistance during the initial phase of a lesson as children with autism are internally driven and are resistant to having external demands placed on them. Maurice et al. (1996) state that a high priority goal for educators and counselors is to make learning fun, thus ensuring the child is engaged in attending to learning the desired task. Another is to teach the child how to discriminate among many different stimuli: colors, shapes, letters, numbers, noise; and appropriate from inappropriate behavior. Through the use of AT devices such as ipads, SMARTboards, laptops and desktop computers, educators can incorporate current technology trends with academic and social objectives while minimizing lost instructional time due to inattention (A. Clark, personal communication, October 10, 2013).

Positive behavioral intervention support (PBIS). The positive behavioral intervention supports (PBIS) approach has gained attention over the years as a method to reduce challenging and disruptive behaviors for children with ASD by utilizing evidence-based practice such as functional behavioral assessments (FBA) to prevent and reduce interfering behaviors at home and in the classroom (Neitzel, 2010). PBIS was implemented as a school-wide preventative strategy aimed at preventing disruptive behavior and enhancing the school's organizational climate by creating and sustaining a comprehensive system of behavioral supports (Bradshaw, Reinke, Brown, Bevans, & Leaf, 2008).

The PBIS model is three-tiered and includes a layer of primary supports (Tier 1) implemented on a school-wide or universal level (Center on Positive Behavioral Intervention

Supports, 2013). These approaches are for all students, staff, and settings and include the development of school-wide expectations, a behavioral matrix, and reinforcement systems to reward desired social behavior. Outcomes, systems, data, and practices are continually evaluated when providing support. Secondary supports (Tier II) are for students with greater needs. Group-based interventions are designed to serve students who have not responded to Tier One interventions (Sugai & Horner,2006). The 10-15% of students in Tier Two is considered at-risk for more severe behavioral problems and/or academic deficits. Tertiary (Tier III) interventions are used on about 5% of the school population requiring individualized, intensive services which include a FBA and subsequent behavior plan.

Neitzel (2010) discusses a model designed to prevent and reduce interfering behavior in school children with ASD by providing evidence based practices such as PBIS. This is accomplished by gradually applying more focused support and intervention for student's using a tiered intervention model. In Tier 1, the goal is to prevent interfering behavior from occurring by addressing the core issues that affect students with ASD. This is accomplished by changing the environment, activities, organizing a high-quality learning environment and building on positive relationships with peers and adults. Tier 2 focuses on three outcomes: (a) using FBA to develop a behavior plan that guides intervention, (b) implementing EBP during ongoing routines and activities to reduce behavior problems, and (c) further developing communication and social skills. Tier 3 provides intensive, individualized instruction to students using information from the FBA to reevaluate, gather additional assessment information and develop a more detailed hypothesis regarding the student's behavior.

Neitzel (2010) outlines the three tier method of PBIS through the use of tables and descriptions of the goal, modifications, intervention strategies, and implementation. The key

theme addressed throughout the literature is the proactive approach used by teachers and staff in intervention strategies to reduce disruptive behavior. Identifying students early by conducting a FBA to assess their needs will help facilitate individualized interventions to reduce interfering behaviors. PBIS is utilized in many school districts (e.g., the Ketchikan School District; Fairbanks Northstar Borough School District, Alaska) as a method to promote and recognize appropriate and positive behavior on the micro and macro levels.

As part of a PBIS mission, staff at Fawn Mountain Elementary School in Ketchikan, Alaska could then incorporate into a PBIS Assembly the motto of being "Safe, Respectful and Learners" through skits, songs and music. Other elementary school in the Ketchikan School District could implement their own mottos to incorporate into school functions. Students district-wide could participate in modeling and acknowledging appropriate and positive behavior while encouraging attentive listening for a discrete period of time, thus students with ASD can be engaged with their peers as active participants in promoting positive behaviors in the school environment.

Application

The application for the project is an electronic quick reference guide for elementary school counselors, paraprofessionals, staff and parents. It is incumbent upon school counselors to have the ability to work with a diverse student population. According to the American School Counselor Association (ASCA, 2012), elementary school counselors are truly jacks-of-all-trades. As more students enter into the school system with or without a formal diagnosis of autistic spectrum disorder, school counselors play a critical role in providing the academic, behavioral and emotional support for the students, staff and parents. It is important for school counselors to have an evidence-based resource available to use as a guidance lesson or an intervention

strategy. This is especially true when working in rural school districts like Ketchikan that have limited resources available to parents, school staff and community organizations. School counselors can help facilitate the organization and implementation of educational and training seminars and workshops to increase public awareness about ASD. This guide is intended to provide a brief overview of three interventions and workshop information that can be utilized when working with students with AS or an ASD.

Each guide has a running head of the intervention or content. Under the heading is a sub-heading included, which provides the reader with information that will be covered about the intervention.

Applied Behavioral Analysis (ABA)

The first intervention is applied behavioral analysis. This intervention was included as it is used extensively in the elementary school in Ketchikan. The special services department in Ketchikan, Alaska chose to utilize the Star Autism Program (STAR) for use in the KGBSD. The program consists of data collection and procedural forms for DTT and PRT lessons, home forms, PBS planning forms, DT Worksheets and functional routines lessons for pre-academics concepts. This program is currently being administered by special education teachers, paraprofessionals and the school district occupational therapist (OT). The step-by-step layout of the work books and DVD's are conducive to setting up the program quickly in a school setting and implementing (T. Jeppsen, personal communication, June 3, 2013). According to one Fawn Mountain Elementary School Special Education teacher, the inability for staff to receive training for students with ASD due to the isolation and cost associated with bringing skilled clinicians to Ketchikan as well as the lack of a district-wide policy for professional development have hampered teachers ability to choose the best resources to use with their students with ASD.

Assistive Technology

The second intervention to be incorporated is assistive technology such as computers, laptops, ipads and SMARTboards (High technology). Students use these electronic devices as a means to communicate, do their school work, games and timers. According to Xin and Sutman (2011), SMARTboards are an interactive tool that can help students to improve their social and communicative skills while reducing their inappropriate behaviors. Students can write their goals, use video self-monitoring or present a Social Story™. Stoller (1998) notes that assistive technology (low) helps increase a student's speed or efficiency by compensating remediating developmental skill deficits. Modifying chairs to provide greater support, positioning student in the classroom for the least amount of distractions or color-coding hallways and rooms that student uses.

Positive Behavioral Intervention Supports

The third evidence based intervention included in the electronic reference guide is PBIS. This section of the guide will have a sample social behavior lesson plan on following directions for elementary students that a counselor can adapt for developmental level and implement in a classroom. This will include a matrix expectation, context, a section on teaching all students through reminders, supervising, feedback and re-teaching the lesson concepts. This section was included as it is aims to alter the school environment by creating improved systems and procedures to promote positive changes in staff and student behavior (Bradshaw & Pas, 2011). All schools in the KGBSD have adopted the PBIS program and have integrated it as part of their efforts to decrease behavior problems while increasing appropriate behavior and attitude. The goal of the district is to re-direct disruptive and interfering behaviors towards increased

instructional time in the classroom thus, raising test scores and achievement (D. Clarkson, personal communication, September 19, 2006).

In-Service Workshop

The fourth section of the quick reference guide is an overview of a school in-service for staff training about students with ASD. One of the strengths and skills of a school counselor is to facilitate a psychoeducational presentation that will enlighten and empower parents, staff and students about ASD. This workshop will consist of a Power Point (PPT) presentation outlining things teachers/staff should know about students with autism; what are the impairments, strengths and weaknesses, physical gestures, sensitivities, interests, comprehension, legal requirements, triggers for meltdowns and de-escalation techniques.

Final Section

The final sections of the quick reference guide provides a wide range of supplemental resources available to school staff, parents and community members which can be accessed through hyperlinks. In addition, a book list of available titles at the local libraries pertaining to feelings, emotions and behavior in fiction and non-fiction will be included. These books are free for the public to check out and use. Included in this section are web links to local, state and national organizations such as Southeast Alliance for Independent Living (SAIL) in Ketchikan Alaska, Alaska Autism Resource Center (AARC) in Anchorage, Alaska and Autism Society. The resources provided allows the reader to access the most up-to-date information and advocacy materials that are evidence-based and utilizes a strengths-based perspective for working with children with autism.

The use of an electronic format can help facilitate easier, faster and a relatively inexpensive delivery method for counselors, parents, educators, staff and medical personnel to

access current research materials to incorporate into an academic and behavioral intervention for students with AS or ASD's.

Conclusion

School counselors in rural and isolated locations may have limited access to resources to help support students with ASD. Discussions with local parents, school counselors, teachers and paraprofessionals indicated the lack of a cohesive and comprehensive service-delivery program that encompasses the community of Ketchikan, Alaska, and the Ketchikan Gateway Borough School District. The application of this project was based on Ketchikan, Alaska, yet the information contained could be easily modified to meet the needs of smaller, isolated communities. As part of the American School Counselor Association Model (ASCA, 2012), "school counselors work with stakeholders both inside and outside the school, to access a vast array of support for student achievement and development that cannot be achieved by an individual, or school alone" (p. 6). The role of the school counselor is to coordinate services required to provide school staff with the necessary materials and training opportunities to create viable educational programs and services for students with ASD consistent to the IDEA and state law (Harley & Redmond, 2010). The school counselor should take the initiative in making families and school personnel aware of his or her role as an advocate for the students with autism through educating all involved parties.

According to a National Health Statistics Report released by the Centers for Disease Control (CDC) on March 20, 2013, it is now estimated that as of 2012, 1 in 88 kids ages 6 to 17 has some form of autism. Due to the increasing number of students with ASD, it is incumbent upon the school counselor to utilize their educational background and training to help parents,

staff and schools to implement an evidence-based and strength-based perspective into the academic, behavioral and social components of the school curriculum and environment.

It is noted that limitations regarding the inclusion of culturally relevant intervention modalities was predicated on the lack of research literature addressing the specific needs and best practices to incorporate with a multicultural population. Further investigation is needed to find current evidence-based research and practices to utilize with ethnically diverse populations as well as students with special needs.

The guide and in-service training materials were developed to serve as a baseline for counselors to implement evidence-based interventions into their practices when working with student's with ASD. The included lessons, web resources and local contact information incorporated into the guide will help direct interested parties towards the available resources in Ketchikan.

References

American Academy of Pediatrics. (2013). Strength Based Approach. Retrieved from http://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/HALF Implementation-Guide/communicating-with-families/pages/Strength-Based Approach.aspx

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed. text rev.). Washington, DC: Author

American Psychiatric Association. (2013*).* Highlights of Changes from DSM-IV-TR to DSM5. Retrieved from http://www.dsm5.org/Documents/changes%20from%20dsm ivtr%20to%20dsm-5.pdf

American School Counseling Association. (2012). *The ASCA national model*: *A framework for school counseling programs* (3rd ed.). Alexandria, VA: Author

Arick, J. R., Young, H. E., Falco, R. A., Loos, L. M., Krug, D. A., Gense, M. H., & Johnson, S. B. (2004). Designing an outcome study to monitor the progress of students with autism spectrum disorders. *Focus On Autism & Other Developmental Disabilities*, *18*(2), 74.

Association for Science in Autism Treatment. (2013). Early detection and intervention. Retrieved from http://www.asatonline.org/

Autism Partnership. (2013). Applied behavioral analysis (ABA). Retrieved from http://www.autismpartnership.com/applied-behavior-analysis

Autism Society of America. (2003a). Facts and statistics. Retrieved from http:www.autism society.org/about-autism/facts-and-statistic.html

Autism Speaks. (2013a). DSM-5 Diagnostic criteria. Retrieved from http://www.autismspeaks.org/what-autism/diagnosis/dsm-5-diagnostic-criteria

Autism Speaks. (2013b). Pivotal response treatment (PRT). Retrieved from http://www.autismspeaks.org/what-autism/treatment/pivotal-response-therapy-prt

Bellini, S., & McConnell, L. (2010). Strength-based educational programming for students with autism spectrum disorders: A case for video self-modeling. *Preventing School Failure, 54*(4), 220-227.

Bellini, S., & Akullian, J. (2007). A meta-analysis of video modeling and video self-modeling interventions for children and adolescents with autism spectrum disorders. *Exceptional Children, 73,* 261-28.

Bradshaw, C. P., Reinke, W. M., Brown, L. D., Bevans, K. B., & Leaf, P. J. (2008). Implementation of school-wide positive behavioral interventions and supports (PBIS) in elementary schools: Observations from a randomized trial. *Education & Treatment Of Children (West Virginia University Press)*, *31*(1), 1-26.

Bradshaw, C.P., & Pas., E.T. (2011). A statewide scale up of positive behavioral interventions and supports: A description of the development of systems of support and analysis of adoption and implementation. *School Psychology Review*,40(4),530-548.

Bryant, D.P., & Bryant, B.R. (2007). *Assistive technology for people with disabilities.* Boston, MA: Pearson Education.

Centers for Disease Control and Prevention. (2012a). Autism spectrum disorders Retrieved from http://www.cdc.gove/ncbddd/autism.fact.html

Centers for Disease Control and Prevention. (2013b). New data on autism spectrum disorders Retrieved from http://www.cdc.gov/Features.CountingAustim/

Center on Positive Behavioral Intervention Support. (2013). School-wide PBIS Retrieved from http://.www.pbisnetwork.org/school/default.aspx

Clark, J. (2010). *Cutting-edge therapies for autism*. New York, NY: Skyhorse Publishing.

Cosden, M., Koegel, L.K., Koegel, R.L., Greenwall, A., & Klein, E. (2006). Strength-based Assessment for chidren with autism spectrum disorders. *Research & Practice for Persons with severe disabilities,31*(2)134-143.

Durand, M.V. (2005). Past, present, and emerging directions in education. In D. Zager (Ed.), *Autism spectrum disorders: Identification, education, and treatment* (pp. 89-199). Mahwah, NJ: Lawrence Erlbaumes Associates.

Educate Autism (2013). Discrete trial training. Retrieved from http://www.educateautism.com/applied-behaviour-analysis/discrete-trial-training.html

Ennis-Cole, D., & Smith, D. (2011). Assistive technology and autism: Expanding the technology leadership role of the school librarian. *School Libraries Worldwide*, *17*(2), 86-98.

Epstein, M.H., & Sharma, J. (1998). *Behavioral and emotional rating scale: A strengths- based approach to assessment.* Austin: PRO-ED

Guldberg, K. (2011). Educating children on the autism spectrum: Preconditions for inclusion and notions of "best practice" in the early years. *British Journal of Special Education*, *37*(4),168-173.

Harely, M.S. & Redmond, P.V. (2010). What educators need to know about autism. Retrieved from http://www.schools.utah.gov/sars/DOCS/disability/edautism.aspx

Henderson, D.A., & Thompson, C.L. (2011). (9^{th} ed.) Counseling Children: Belmont CA: Brooks/Cole

Indian Resource Center for Autism. (2013). *A brief explanation of discrete trial training.* Retrieved from http://*www.iidc.indiana.edu/?pageId=451*

Johnston, L., Beard, L.A., & Carpenter, L.B. (2007). *Assistive technology: Access for all*

students. Upper Saddle River, NJ: Pearson Education.

Kimball, J.W. (2011). Behavior-analytic instruction for children with autism: Philosophy matters. *Focus on Autism & Other Developmental Disabilities*, *17*(2),66.

Layne, C. (2007). Early identification of autism: implications for counselors. *Journal of Counseling and Development, 85*(1), 100-114.

Le Couteur, A., Haden, G., Hammal, D., & McConachie, H. (2008). Diagnosing autism spectrum disorders in pre-school children using two standardised assessment instruments: The ADI-R and the ADOS. *Journal Of Autism & Developmental Disorders*, *38*(2), 362-372.

Le Couteur, A., Lord, C., & Rutter, M. (2003). *The Autism Diagnostic Interview—Revised (ADI-R).* Los Angeles, CA: Western Psychological Services.

Lickel, A., MacLean Jr., W., Blakeley-Smith, A., & Hepburn, S. (2012). Assessment of the prerequisite skills for cognitive behavioral therapy in children with and without autism spectrum disorders. *Journal Of Autism & Developmental Disorders*, *42*(6), 9921000. doi:10.1007/s10803-011-1330-x

Matson, J., & Sipes, M. (2010). Methods of early diagnosis and tracking for autism and pervasive developmental disorder not otherwise specified (PDDNOS). *Journal Of Developmental & Physical Disabilities*, *22*(4), 343-358. doi:10.1007/s10882-009-9184-2

Mattson, J.L., Fodstad, J.C., & Dempsey, T. (2009). What symptoms predict the diagnosis of autism or PDD-NOS in infants and toddlers with developmental delays using the baby and infant screen for autism traits. *Developmental Neurorehabilitation*, *12*(6), 381-388. doi:10.3109/17518420903029501

Meadan, H., Ostrosky, M., Triplett, B., Michna, A. & Fettig, A. (2011). Using visual supports with young children with autism spectrum disorder. *Teaching Exceptional Children, 43*(6), 28-35.

Maurice, C., Green, G., & Luce, S.C. (eds.). (1996). *Behavioral interventions for young children with autism. A manual for Parents and Professionals.* Austin, TX: Pro-ed publishing.

Miller, L. D., Short, C., Garland, E., & Clark, S. (2010).The ABCs of CBT (cognitive behavior therapy): Evidence-based approaches to child anxiety in public school settings. *Journal Of Counseling & Development*, *88*(4), 432-439.

National Association on Mental Health. (2013). Cognitive Behavioral Therapy (CBT)? Retrieved July 15, 2013 from www.nami.org/Template.cfm?Section=about_Treatments_and_Supports&template=/ContentManagement/ContentDisplay.cfm&ContentID=7952

National Autism Center. (2011) Evidence-based practice and autism in schools. A guide to Providing appropriate interventions to students with autism spectrum disorders. Retrieved from http://www.nationalautismcenter.org/pdf/NAC%20Ed%20Manual_FINAL.pdf

National Institute of Mental Health. (2012). *A parent's guide to autism spectrum disorder.* Retrieved March 12, 2013 from www.nimh.gov/health.publications/a-parents-guide-to-autism-spectrum-disorder/index.shtml

Neitzel, J. (2010). Positive behavior supports for children and youth with autism spectrum disorders. *Preventing School Failure, 54(4),* 247-255.

Newman, L. 2005. Family expectations and involvement for youth with disabilities. *National Longitudinal Transition Study 2 Data Brief* 4(2): 1–5.

Patten, E. & Watson, L. (2011). Interventions targeting attention in young children with autism. *American Journal of Speech-Language Pathology, 20,* 60-69.

Pivotal Response Treatment for Autism. (2013). Pivotal response treatment and training for autism. Retrieved from, http://www.koegelautism.com/about-pivotal-response-training.html

Rotheram-Fuller, E., & MacMullen, L. (2011). Cognitive-behavioral therapy for children with autism spectrum disorders. *Psychology In The Schools*, *48*(3), 263-271.

Schoen, A. (2003). What potential does the applied behavior analysis approach have for the treatment of children and youth with autism? *Journal Of Instructional Psychology*, *30*(2), 125.

Sikora, D. M., Hall, T. A., Hartley, S. L., Gerrard-Morris, A. E., & Cagle, S. (2008). Does parent report of behavior differ across ADOS-G classifications: Analysis of scores from the CBCL and GARS. *Journal Of Autism & Developmental Disorders*, *38*(3), 440-448. doi:10.1007/s10803-007-0407-z

Studer, J. R., & Quigney, T. A. (2003). An analysis of the time spent with students with special needs by professional school counselors. *American Secondary Education*, *31*(2), 71-83.

Sugai, G., & Homer, R. R. (2006). A promising approach for expanding and sustaining school -wide positive behavior support. *School Psychology Review*, *35*(2), 245-259.

Sugai, G., Horner, R.H., Dunlap, G., Hieneman, M., Nelson, C.M., Scott, T.,… Ruef, M. (2000). Applying positive behavior support and functional behavioral assessment in schools. *Journal of Positive Behavior Interventions*, *2*(3), 131-143.

Sze, S. (2009). The effects of assistive technology on students with disabilities. *Journal of Educational Technology Systems*, *37*(4), 419-429. doi: 10.2190/ET.37.4.f

Xin, J.F., & Sutman, F. (2011). Using the smart board in teaching social stories to students with autism. *Teaching Exceptional Children,*43 (4,)18-24.

University of Iowa Regional Autism Services Program Child Health Specialty Clinic. (2013). Summary of autism definitions and criteria federal regulation/Iowa definition. Retrieved from http://www.healthcare.uiowa.edu/autismservices/autism_definition.htm

Wallis, C., & Goehner, A.L. (2006). A tale of two schools. *Time, 167,*(20), 48-51.

Weishaar, P. M. (2010). Twelve ways to incorporate strengths-based planning into the IEP process. *Clearing House*, *83*(6), 207-210. doi:10.1080/00098650903505381

Webber, J., & Scheurmann, B. (2008). *Educating students with autism: A quick start manual.* Austin, TX:. Pro.ed publishing.

Wood, J. J., Drahota, A., Sze, K., Van Dyke, M., Decker, K., Fujii, C., ... Spiker, M. (2009). Brief report: Effects of cognitive behavioral therapy on parent-reported autism symptoms in school-age children with high-functioning autism. *Journal Of Autism & Developmental Disorders*, *39*(11), 1608-1612.

QUICK REFERENCE GUIDE

Behavioral and Social Intervention Strategies for Elementary Children with Autistic Spectrum Disorder

Kristin Flora
In Partial Fulfillment of the Requirements of the Degree of Masters of Education, Counseling

Committee Members:

Christine Cook, Ph.D.
Joanne Healy, M.Ed.
Brenda Henze-Nelson, M.Ed.

https://encryptedtbn3.gstatic.com/images?q=tbn:ANd9GcTMq767Qr0dkYOloAzJUM9dskFJOpTqGcbpz_LNDh9qu4Sa60PRKg

https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcT-Ed1xe72ds_LiEU8lY_fxWoAVwkuw7cI25QU2yx2_FOuS6BRj

Table of Contents

Introduction

The quick reference guide was developed as a resource for school counselors to use when working with students with Autism Spectrum Disorder (ASD) as well as provide information for parents and school staff members. The three evidence-based programs (EBP) are from the strengths-based perspective (SBP). Each of these interventions focuses on academic skills, behavioral and social acquisition as a modality for school staff to utilize with students with ASD.

The first intervention, applied behavioral analysis using lesson plans that reference the STAR Program will consist of a Level I pre-academic skill, a Level II functional skill and a Level III play skill. This program was selected as it is the primary Evidence-Based Program (EVB) used in the Ketchikan Gateway Borough School District. KGBSD. The second intervention, assistive technology will demonstrate a social skill lesson using a SMARTBoard. Students will role-play with the counselor a social acquisition skill. The last intervention is Positive Behavioral Intervention Supports. This is a school-wide intervention that works on the macro/micro level. Classroom teachers can pair up with a different age-level class to demonstrate a desired behavior in a school assembly, classroom setting or one-on-one situation to encourage and practice appropriate behavior.

These interventions were selected as they are evidence-based, and stem from the strengths-based perspective. This is important when factoring in an ethnically diverse population that may have language restrictions. Role-playing can transcend across cultural and language barriers. Parents, staff, administration and students can reap the benefits from a curriculum and school environment that embraces an inclusive-friendly perspective. It is incumbent upon staff members to stay abreast of current literature and treatment modalities that will provide “best practices” for students with ASD.

Sample activity to introduce Kindergarten-age students to the letter/sounds of "a->/a/ using Applied Behavioral Analysis

Introduce /a/

Activity Type: Introduce

Activity Form: Standard

Grade: K

Group Size: Small Group, Whole Class

Length: 5 minutes

Materials:

- Letter card (print here)
- Pronunciation guide (listen here)

Goal: Given a printed letter, the student can say its sound (a -> /a/)

Items: a

What to do

1. Write the letter *a* on the board; make it at least a foot tall. Alternatively, use a letter card large enough for the whole group to see easily.
2. **The sound for this letter is /aaa/.** (Say the /a/ sound as in *hat*, holding it for at least a second.) **When you say /aaa/, your mouth is open: /aaa/ and your voice box is on: /aaa/. Touch your throat to make sure your voice box is on when you say it: /aaa/. What's the sound?**
3. Look for students who are not saying the sound. Ask them: **What's the sound?** Look for students who are making the wrong sound and model the sound for them until they have it right. **Well done everyone.**
4. **We use the /a/ sound to begin words like *animal, answer, ask, apple, am*. Can you tell me some other words that begin with /a/?**
5. Write 12 letters on the board: 4 of the letters should be *a* and they should be interspersed with 8 other letters dissimilar in appearance to *a*, such as *x* and *l*.
6. **When I point to the letter we just learned, say its sound. When I point to any other letter, you have to stay quiet. My turn first.** Point to a series of letters and either say the sound or make a performance of saying nothing, as appropriate.
7. **Your turn. Ready?** Point to letters randomly, holding on each one for a few seconds.

If a student says the sound for one of the other letters (not *a*), point to *a* and say: **You only need to make a sound for this letter. When I point to any other letter, stay quiet. Ready?** Look for individuals who are saying nothing when you point to *a*. Have those students try letters individually until they have it (but don't call only on struggling students). Keep going until everyone has it.

Adapted from: The Star Autism Program-Strategies for Teaching Based on Autism Research-Program Manual, Joel R. Arick, Lauren Loos, Ruth Falco & David A. Krug (2004). Lessons were written by Adrienne Clark. Permission was granted to use, 2013.

Sample Math Lesson Plan for Kindergartners using Applied Behavioral Analysis

Lesson: Shape Identification

Alaska Model Content Standards: Math – Geometry

[K] G-3 (M5.1.1) – Identify triangle, circle, rectangle and square

Objective: TSW identify the shapes: circle, triangle, square, and rectangle, when given the cue, "Give me X," 3 out of 3 times for 2 consecutive days.

Materials:

Several concrete items of each shape, representational pictures of shapes, abstract shape flash cards from STAR curriculum.

Anticipatory Set:

Show the student the first item. Tell them what the shape is.

Procedure:

First Matching, then individual identification

Using duplicate concrete objects complete the following steps:

Teacher places one shape in front of the student and a similar or identical shape 6 to 10 inches away. Teacher says, "Match X" where X is the name of the shape.

Use Discrete Trial Introduction Procedures for STAR program (Star, 2010) to introduce shapes to match until all four shapes can be presented in front of the student at the same time. The student should be able to choose from the four shapes the one shape that matches to same.

When student is able to match shapes accurately move to receptive shape identification without a match.

Using the Discrete Trial Introduction Procedures for STAR program, introduce one shape at a time to identify.

Given concrete, representational and abstract flash cards, starting with one shape, say, "Give me X," where is X.

Continue to teach each new shape according to the STAR Discrete Trial Introduction Procedures. Randomize with previously learn shapes before teaching a new shape. Place up to 4 shapes at a time in front of the student.

Assessment: Given 4 shapes and asked, "Give me X," the student will identify and give the correct shape, 3 out of 3 trials over 2 consecutive days.

Adapted from: The Star Autism Program-Strategies for Teaching Based on Autism Research-Program Manual, Joel R. Arick, Lauren Loos, Ruth Falco & David A. Krug (2004). Lessons were written by Adrienne Clark. Special Education Teacher, Ketchikan Gateway Borough School District Permission was granted to use, 2013.

Sample Social Activity for Kindergartners through third grade using Applied Behavioral Analysis.

1. When you see someone in the classroom, you say:

"Hi, how are you?" 

 "I'm good. How are you?"

2. When you pass someone in the hallway, you say:

 "Hi."
 "Hi."

3. When someone is leaving, you say, "Goodbye."

 "Goodbye."
 "Goodbye."

Your Turn To Practice!

Who will I try this with?_____

What happened?_____

How did I do?_____

Adapted from: Jed E. Baker, Social Skills Training for Children and Adolescents with Asperger Syndrome and Social-Communication Problems (2003).). Lessons were written by Debbie Christensen. Special Education Teacher, Ketchikan Gateway Borough School District. Permission was granted to use, 2013.

Suggested Social Activities for Greeting Others Using Applied Behavioral Analysis

---

1. Model and role-play the skill using the following situations.

    a. Role-play the correct way to say hello. Point out the wrong way in which to say hello, or say it over and over to the same person.
    b. Pretend to pass someone in the hallway. Practice saying, "hello."
    c. Role-play the correct way to say goodbye. Point out the wrong way to say goodbye or say it over and over to the same person.

2. Purposely walk close to the child and do not say anything, waiting for the student to say hello first. If nothing is said, make the greeting and wait for them to respond. If nothing is said again, prompt them to make the greeting.

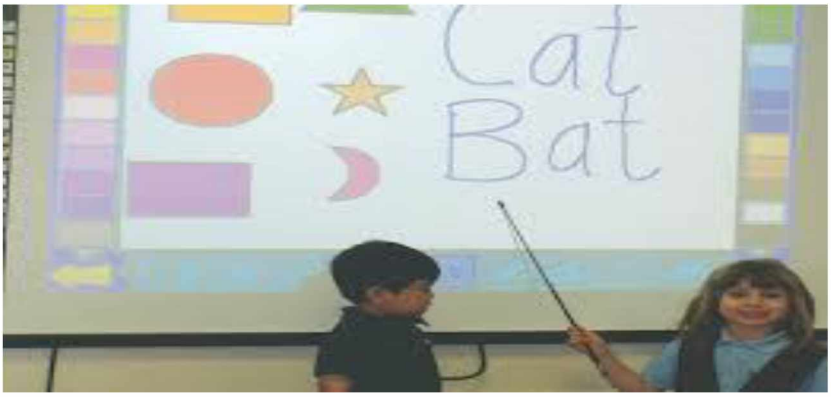
3. Provide corrective feedback when the student does not make a greeting.

4. Provide rewards for appropriate greetings.

    a. Give verbal praise for correct or partially correct greetings.
    Give tokens, pennies, or points every time student makes an appropriate greeting...
    When student meets required number of tokens, give special reward (e.g., snack, stickers, free-time or story time).

Adapted from: Jed E. Baker, Social Skills Training for Children and Adolescents with Asperger Syndrome and Social-Communication Problems (2003).). Lessons were written by Debbie Christensen. Special Education Teacher, Ketchikan Gateway Borough School District..Permission was granted to use, 2013.

Assistive Technology



https://encrypted-tbn1.gstatic.com/images?q=tbn:ANd9GcQik6qNhnaNThNc1QmyTBuSPCn5G1Ov3p5Fo44Zi6fbrLmztUNlaQ

How to Use a SMARTboard

1 **Turn on your computer and your Smart Board**. If this is your first use, or if the Smart Board has been recently moved, you will need to do a calibration.

- To calibrate the Smart Board, press the keyboard and right mouse button at the same time. An icon will appear in the upper-left area of the screen. Touch this icon with a Smart Board pen or your finger. Repeat every time you see the icon until calibration is complete.

2 Touch your finger once on the screen to mimic a left mouse click.

- Press and hold your finger on a spot on the board for a right mouse click.
- Click and drag with your finger to move an object on the screen to another location.

3 **Write on the smart board using the smart board pens**. These come in various colors, but the board will only remember the last color used. Do anything you would normally do on a whiteboard: draw, write or annotate.

- To erase items on the smart board, first replace the pens in the tray. Use the board eraser as you would a normal one.
- You can clear all the writing at one time by touching the board and selecting "Clear Ink."
- You can also draw a circle around the writing with the eraser and tap in the middle of the circle to erase everything.

4 **Save your work to the smart board by touching the board and selecting "Save Ink."** Your notes will be saved in the SMART Notebook. Select File and Save to complete the process.

- You can also click on the camera which appears in the top right corner.

5 **Clean the smart board using an alcohol free window cleaner**. Use a soft, clean cloth and do not spray directly on the smart board. Alcohol free wipes may also be used (www.wikihow.com/Use -a-Smarboard).

Using a SMARTboard in the Classroom

Alaska Model Content Standards: Language Arts

Target skill: Looking at the teacher as requested, reading words on the SMARTboard when asked without refusal.

Grade Level: Kindergarten

Objective: Student will walk up to SMARTboard when asked and read the words "Cat, bat and hat."

Anticipatory Set: Show the student how to walk up to the board, pick up the colored smart pens to point at words.

Performance Criteria: This skill will be *performed adequately* when the student:

1. Walks directly up to the board when asked.
2. Does not refuse request.
3. Reads all of the words on the SMARTboard.
4. Goes directly back to their seat when asked.

Materials Required: SMARTboard, Kindergarten vocabulary list

Assessment: Point to words on SMARTboard and ask student what each word says. Student will identify and give correct answer 3 out of 3 times over two consecutive days.

Developed from: Debbie Christensen,Special Education Teacher, Ketchikan Gateway Borough School District .Permission was granted to use, 2013.

Positive Behavioral Intervention Supports (PBIS)

A Sample Behavior Matrix that is used in all settings of Fawn Mountain Elementary School.

I am...	All Settings	Classrooms	Hallways	Cafeteria	Bathrooms	Playground	Assemblies	Bus Line
Safe	-keep bodies calm in line -report any problems -ask permission to leave any setting -keep body to yourself	-remember your space	-walk -stay to your right	-walk in line -sit at your assigned table -stay seated until excused -no food or beverage in gym or on playground	-wash hands with soap and water -keep water in the sink -one person per stall	-use equipment for intended purpose -wood chips stay on the ground -keep body to self -no food allowed on the playground -ask permission to leave the playground	-enter and exit the assembly area in an orderly manner -keep hands and feet to yourself	Line up and walk single file No food
Respectful	-treat others the way you want to be treated -stop, look and listen to adult instructions	-be honest -take care of yourself -use a kind voice	-quietly walk -follow leader directions -make good choices -be considerate	-use a peaceful voice -raise your hand for permission to get up -place trash in trash can	-allow for privacy of others -clean up after self -use a peaceful voice	-use kind words	-raise your hand to share -applaud appropriately -quietly leave only during breaks, after asking teacher -wait to be dismissed	Stay in area until bus is called and teacher has excused group -line up by grade for each bus -respect students in front and behind you
A Learner	-be an active participant -share electronics during school hours-cooperate -do your best	-try new things -be ready to learn -make good choices	-travel to and from destination promptly	-use proper manners -take responsibility for clean up -leave when adult excuses	-follow bathroom procedures -return to class promptly	-include all who want to join in activities -take turns	-keep comments and questions on topic -be an active participant	-watch bus line attendant to see when to board -have bus note when riding a different bus

(Permission to use from was granted from the Ketchikan Gateway Borough School District PBIS Team, 2013).

Fawn Mountain Elementary School

Code of Conduct

Student Self- Assessment Form

Name: _____

Date: _____ Time: _____ Place: _____

1) Which school rule(s) did you break? (circle the rule or rules)

BE Safe **Be Respectful** **Be A Learner**

2) What did you want?
   - I wanted attention from an adult.
   - I wanted attention from another child.
   - I wanted to make an adult become angry.
   - I wanted to let someone know I am mad at them.
   - I wanted to avoid doing my schoolwork.
   - I wanted to cause others problems because I don't think they like me.
   - I wanted to be in control of the situation.
   - I wanted something that someone else has.
   - I wanted _____

3) This is what happened:

This is what I could have done to make a better choice:

_____

_____

4) This is how I will solve the problem:

_____

_____

Teacher comments:

_____

_____

This form was given by: _____ (teacher)

Date: _____ Time: _____

(Permission to use was granted by the Fawn Mountain Ketchikan Gateway Borough School District PBIS team, 2013).

Fawn Mountain School Agreements

Mutual Respect: We will treat people the way we want to be treated.

Appreciation/No Put-Downs: We will speak kindly to others and think of other people's feelings

Attentive Listening: We will listen with our eyes, ears and heart.

Right to participate/pass: We have the right to pass in certain activities and know that the more we participate the more we gain.

Safety: We will always think of safety first!

****

(Permission to use was granted by the Fawn Mountain Ketchikan Gateway Borough School District PBIS team, 2013).

Fawn Mountain Lunchroom Expectations

Our Motto is:

Treat others the way you like to be treated!

- Walk in a line to pick up your lunch or your milk. If you bring everything from home go straight to your table.
- Each class will be assigned tables. You may sit only at your assigned table.
- Sit on benches on your behind with your feet under the table.
- Stay in your seat until everyone in your class done eating and your teacher tells you it is time to leave. At that time, line up and as you leave the lunch room put your lunch trash in the trash cans.
- Before leaving your area, check for trash and pick it up.
- If you need to go to the bathroom during lunch, raise your hand and wait for permission before getting up and getting a bathroom pass.
- The two people from each class that are stay behind, get spray bottles and brooms and clean up for the next group.
- Be respectful of all adults and children
- Voices echo in the lunchroom, so please speak in soft voices and only to those sitting near you.
- You may not take any food or beverage to the playground or gym.

Possible consequences for inappropriate dining behavior:

- You will remain behind during recess time and help clean up the lunchroom. This includes moving the tables, sweeping and mopping.
- Sit in the office until recess is over.
- Call your parents and tell them what you did in the lunchroom.

(Permission to use was granted by the Fawn Mountain PBIS team, 2013)

Fawn Mountain Elementary School
Office Discipline Referral

Student: IEP Y or N	Date:
Grade: K 1 2 3 4 5 6	Time of incident:
Classroom teacher:	Referred by:
Location of incident (please check) __ classroom __library __ playground __hallway __special event (field trip/assembly) __bus area __on bus __cafeteria __bathroom	
TIME OUT REFERRAL: ____ Length of time_____	
REASON FOR REFERRAL: Please attach narrative of the incident (if necessary)	

SAFETY	RESPECT	LEARNER
Minor___ ___Physical contact Major__ ___Bullying ___Physical aggression/assault ___Danger to self or others ___Weapons ___Other_____	Minor___ ___Defiance/disrespect/non-compliance ___Inappropriate language ___Disruption Major___ ___Disruption ___Verbal assault/threat ___Damage or destruction of property ___Disrespect/non- compliance ___Inappropriate language ___ Other_____	Minor___ ___Property misuse ___Not following directions Major___ ___Schoolwork/homework ___Possession of illegal school objects ___Technology violation ___Other_____

POSSIBLE MOTIVATION:	OTHERS INVOLVED:
___Attention from peer(s) ___Attention from adult(s) ___Avoid peer(s) ___Avoid adult(s) ___Avoid work ___Obtain item ___Don't know ___Other_____	___None ___Peers ___Staff____ ___Substitute ___Unknown___

TEACHER ACTION TAKEN PRIOR TO REFERRAL:

___Changed student seat ___Consulted Counselor ___Sent previous report home
___Conferred privately with student ___Consulted Principal ___Time out in classroom
___Had a parent conference ___Telephoned/parent/guardian
___Other (use back of form if necessary)

TYPE OF DISCIPLINE ASSIGNED BY ADMINISTRATION:

___Counselor referral ___Time out in office ___Parent contact
___Out of school suspension ___Time out in buddy room ___Sent home
___Loss of privilege ___Individual instruction ___In school suspension
___Conference with student ___Other (please specify) (use back if needed)

Parent Contacted: Check one: ___Call ___Mail ___Message ___Email

COMMENTS: (use back of form if necessary)_____

(Permission to use was granted by the Fawn Mountain PBIS team, 2013).

Playground Expectations

The main objective for recess is to provide an opportunity for children to learn to play in a safe, cooperative and non-aggressive manner. Students have a right to a safe playground and a responsibility to behave in a manner that will not endanger themselves or other children.

At Fawn Mountain Elementary, we expect

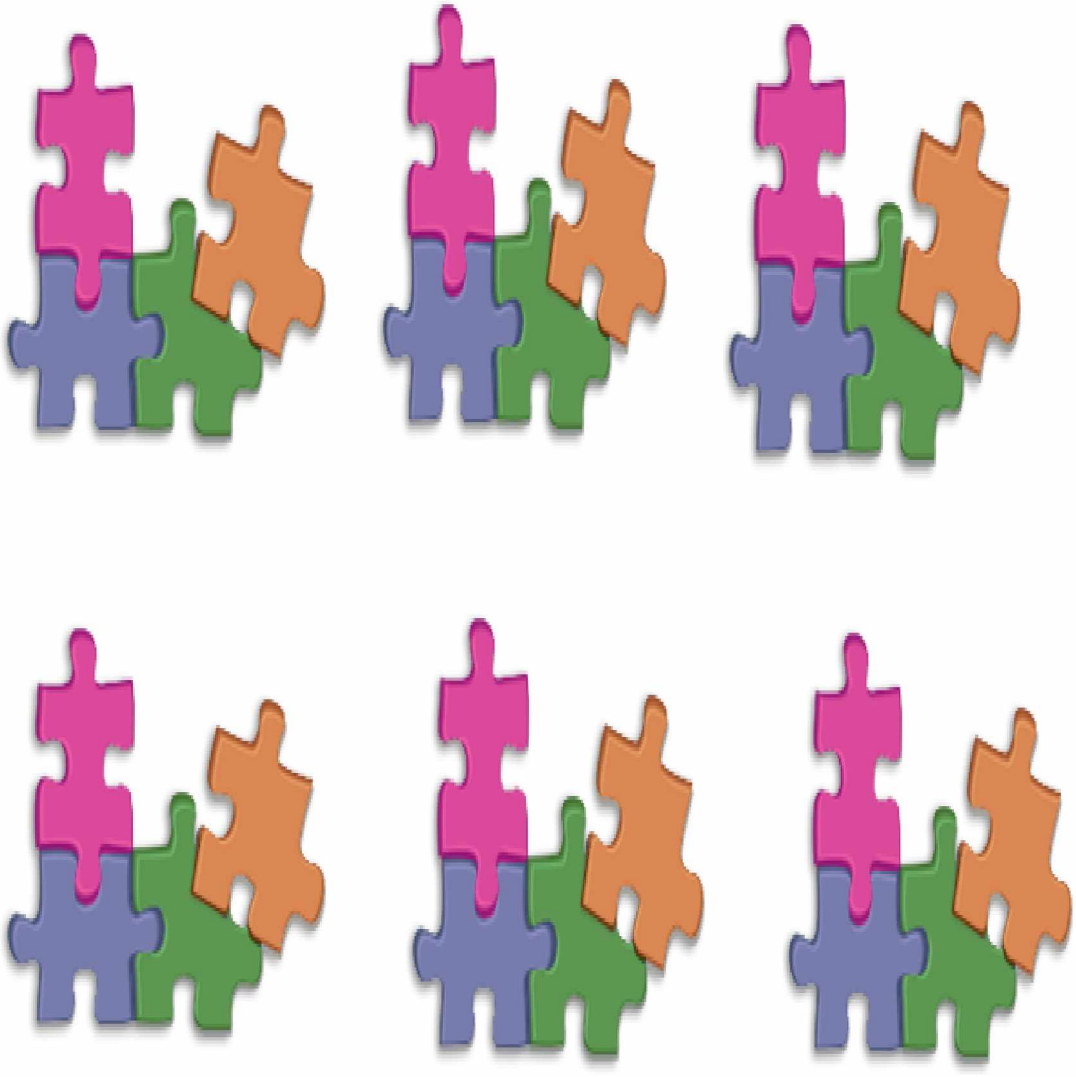
- Students to treat others the way they like to be treated.
- Excellent sportsmanship from all students during the games played at recess time.
- Students to "Stop, Look and Listen" if they hear a whistle from the supervisor. Immediately obey any direction given after the whistle.
- Students to follow directions of the supervisors, the first time, with no argument.
- Students to respect other's games by walking or running around the game areas.
- No electronic toys on the playground or at school.
- Everyone to stay in the supervised, assigned areas during all recesses.
- Respect shown to all by not pushing, shoving or using inappropriate language. We don't want to see anything that looks like fighting.
- No food or drinks on the playground.
- For everyone's safety, do not jump off of swings or sit on top of the climbing wall. Wait for the person on the slide to get off before the next person goes down.
- Students to contact a duty person before leaving the playground.
- Students to be sitting on the swings, hands on the chains, swinging and counting to 100 if other students are waiting for a turn on the swings.
- Students to count o 100 on anything others are waiting to use.

Consequences for not following expectations

- Time out, either with a playground supervisor or standing by a wall or fence.
- If it continues to be a problem, visits with Mrs. Roberts, phone calls to parents, letters of apology, etc.

(Permission was granted to use by the Fawn Mountain PBIS team, 2013)

Academic, Behavioral and Social Intervention Strategies for Elementary Children with Autistic Spectrum Disorder



Today's Presenters

- KGBSD-Special Services Offices
- School Counselor
- Special Education Teacher
- Special Education Service Agency (SESA)

*** Director of Special Services**

Services provided by the District

Educational/Training Opportunities

*** The role of School Counselors**

Facilitation of Services and Resources

*** Autism in the classroom**

Working with Students with ASD

IEP's, Documentation

Lesson Plans

*** Behavior Specialists**

Autism Awareness

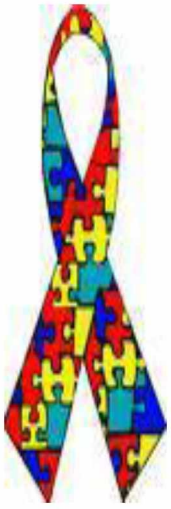
PBS Strategies

Curriculum Modifications/Accom.

EVB-Interventions

Using CBT to Decrease Challenging Behaviors

District Trainings



NOTES:

EVB- Evidence-Based practices
CBT-Cognitive behavioral therapy
IEP- Individual Education Plan
PBS-Positive behavioral supportEVB- Evidence-Based practices
CBT-Cognitive behavioral therapy
IEP- Individual Education Plan
PBS-Positive behavioral support

What is Autistic Spectrum Disorder? (ASD)

Autism is a group of developmental brain disorders, collectively called autism spectrum disorder (ASD).

The term "spectrum" refers to the wide range of symptoms, skills, and levels of impairment, or disability, that children with ASD can have. Some children are mildly impaired by their symptoms, but others are severely disabled.

Autism is the fastest growing developmental disorder in the United States

Prevalence rates of American children with autism spectrum disorder has increased significantly since 2007.

It is now estimated that as of 2012 1 in 88 children (1 in 54 boys, and 1 in 252 girls) ages 6 to 17 has some form of autisim.

National Health Statistics Report released by the Centers for Disease Control (CDC)
National Institute of Mental Health,((2012).
Autism Society of America (2003)

/imgres?imgurl=www.puertoricowow.com/assets/images/h-autism.jpg&imgrefurl=http://www.puertoricowow.com/html/h-tantrums.html&h=180&w=143&prev=/images%3Fq%3Dautism%26start%3D60%26svnum%3D10%26hl%3Den%26lr%3D%26ie%3DUTF-8%26oe%3DUTF-8%26sa%3DN

Autism Spectrum Disorders

- ASD is diagnosed according to the guidelines listed in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*-(DSM-V) (APA,2013).

- The manual currently includes five disorders, sometimes called pervasive developmental disorders (PDDs), as ASD:

- Autistic Disorder (AD)

- Asperger' Syndrome (AS)

- Pervasive Developmental Disorder not otherwise specified (PDD-NOS)

- Rett's disorder (Rett syndrome)

- Childhood disintegrative disorder (CDD)

The American Psychiatric Association (2013)

DSM-IV-TR Definition of Autism

American Psychological Association (APA, 2000)

(Used until the DSM-V was published in May, 2013)

Impairment in Socialization

Restricted & Repetitive Behavior

Impairment in Communication

New DSM-V Definition of ASD

- The American Psychiatric Association (2013) has a new diagnostic definition for autism as part of the revisions to *the Diagnostic and Statistical Manual of Mental Disorders* (DSM-V).

- According to the Autism Society (2013), the proposal recommends a new category called Autism Spectrum Disorder which would incorporate several previously separate diagnoses, including:

- AD
- AS
- CDD
- PDD-NOS.

NOTES:

Revisions to the DSM-IV criteria for ASDs have been made in effort to increase diagnostic sensitivity and specificity. The proposal asserts that symptoms of th represent a continuum from mild to severe, rather than a simple yes or no diagnosis to a specific disorder.

The proposed diagnostic criteria for Autism Spectrum Disorder specify a range of severity as well as describe the individual's overall developmental status- In –social communication and other relevant cognitive and motor behaviors.

The American Psychiatric Association ((2013)
Autism Society (2013)

Autism Spectrum Disorders Continued

PDD-NOS

Impaired social interaction
or
Impaired communication
or
Restricted repetitive and stereotyped patterns or behaviors, interests and activities

Autistic Disorder

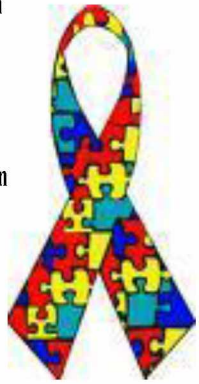
Impaired social interaction
and
Impaired communication
and
Restricted repetitive and stereotyped patterns or behaviors, interests and activities

Asperger's Disorder

Impaired social interaction
and
Normal communication-language development.
and
Restricted repetitive and stereotyped patterns or behaviors, interests and activities

Rett's Disorder

Progressive disorder which, almost exclusively occurs in females
Period of normal development and then the loss of previously acquired skills
Also loss of purposeful use of hands, which is replaced by repetitive hand movements
Beginning at age of 1-2 years, typically in first 5 months
Characterized by head growth deceleration and loss of previously acquired skills between 5-48 months
Entered into the DSM IV in 1994



The American Psychiatric Association (2013)
Autism Society (2013)

ASD is a Neurobiological/Neurodevelopmental disorder that impacts:

- Processing
- Attention and shifting
- Basic social behaviors
- Interaction with the environment
- Learning

The American Psychiatric Association (2013)
Autism Society (2013)

12 Things Teachers Should Know About Autism

1. Autism is a Pervasive Developmental Disorder
2. Autism is a "Spectrum" Disorder
3. Self-stimulatory behavior (Stimming)
4. Sensory Sensitivity
5. Obsessive Interests
6. Literal Comprehension

NOTES:

Pervasive Developmental Disorders (PDD) refers to a group of five disorders characterized by delays in the development of basic functions including socialization and communication.
Autism is a "spectrum" disorder (ASD) because it can affect each person in different ways and can range from mild to severe.
Stimming is sometimes called "stereotypic behavior" and usually refers to specific behaviors such as flapping, rocking, spinning, or repetition of words and phrases.

Listphoria.blogspot.com/12-things-teachers-should-know-about.html

12 Things Teachers Should Know About Autism/Cont.

7. Eye Contact/Body/Language
8. Troubles with Generalization
9. Troubles with "theory of mind"
10. Anxiety
11. Meltdowns
12. Separate them from students who manipulate

NOTES:

Sensory sensitivity refers to a pattern of sensory processing that is characterized by low sensory thresholds and a passive self-regulation strategy. Often people with sensory sensitivity detect more input than others. Students with ASD can become attached to objects such as toys, bottle caps or shoes. People will often learn a lot about a thing they are obsessed with, be intensely interested in it for a long time. They enjoy repetitive behavior and routines as a way to cope with everyday life. Children with ASD can have the ability to read something, then have a real understanding of what they have just read. In other words, they have literal comprehension.

Listphoria.blogspot.com/12-things-teachers-should-know-about.html

Preventing Problems

To create a positive classroom where there is order and continuity it is important to have:

Knowledge of your students

Positive Behavioral Support (PBS)

A good rapport with staff and students

A safe environment

Adriennce Clark (2013)

Building/District Resources

Building Level

- Special education teachers
- School counselor
- Speech pathologist
- Paraprofessionals/one-on-one
- Parents

District Level

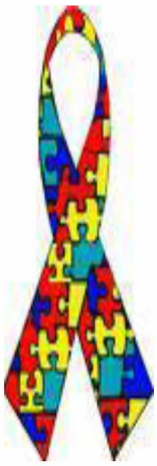
- Special education director
- Parents
- School psychologists
- Special education services agency (SESA)

Adrienne Clark and Terri Jeppsen (2013)

Legal Requirements

Knowing what the laws are for the state of Alaska

- Annual review and update
- Building capacity and expertise
- Data collection
- District-wide training mandates
- Establishing a district protocol
- Evaluation requirements
- IDEA
- IEP
- FAPE
- LRE
- Parent training
- Protocols and regular review
- Solicitation of staff and parent input
- Supplementary programs and services not required for FAPE
- Staff training
- Support services



- Harley and Redmond (2010)

Community Resources

- Big Brothers/Big Sister 247-3350/Emergencies 821-1159
- Community Connections 225-1541
- Ketchikan Indian Community 228-4917
- Ketchikan Resource Guide ktnwc@yahoo.com
- Southeast Alaska Independent Living (SAIL) 225-4753

References

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed.text rev.). Washington, DC: Author

Autism Society of America. (2003). *Facts and Statistics.* Retrieved April 11, 2012 from http:www.autism-society.org/about-autism/facts-and-statistic.html

Centers for Disease Control and Prevention. (2013). *New data on autism spectrum disorders* Retrieved from http://www.cdc.gov/Features.CountingAustim/

Harely, M.S. & Redmond, P.V. (2010). *What educators need to know about autism.* Retrieved from http://www.schools.utah.gov/sars/DOCS/disability/edautism.aspx

Kluth, P. (2013). *Supporting students with autism.* Retrieved from www.paulakluth.com/readings/autism-tenideas

12 things teachers should now about students with autism. (2009). Retrieved from Listphoria.blogspot.com/12-things-teachers-should-know-about.html

National Institute of Mental Health. (2013). *A parent's guide to autism spectrum disorder* Retrieved March 12, 2013 from www.nimh.gov/health.publications/a-parents-guide-to-autism-spectrum-disorder/index.shtml.

Autism Resources-Books

Ask and Tell: Self-Advocacy and Disclosure for People on the Autism Spectrum (2004)

By Ruth Elaine Joyner Hane, Kassiane Sibly, Stehpen M. Shore…Liane Holliday Willey.

Foreword by Temple Grandin,(Stephen M. Shore), Publisher: Autism Asperger's Publishing Co.

Behavioral Intervention for Young Children with Autism: A Manual for Parents and Professionals (1996)

Edited by Catherine Maurice, Co-edited by Gina Green and Stephen Luce

Educating Students with Autism: A Quick Start Manual (2008)

Jo Webber and Brenda Sheuremann

Exceptional Learners: An Introduction to Special Education (2009)

Daniel P. Hallahan, James M. Kauffman and Paige C. Pullen; Pearson

Social Skills for Students with Autism Spectrum Disorders (2012)

Laurence R. Sargent, Darlene Perner and Toni Cook; Council for Exceptional Learners

Social Skills Training for Children and Adolescents with Asperger Syndrome and Social-Communicatioin Problems (2003)

Jed E. Baker Autism Asperger Publishing

Ten Things Every Child With Autism Wishes You Knew (2005)

Ellen Notbohm Future Horizons Publishing

The Social Skills Picture Book for High School and Beyond (2006)

Jed E. Baker

Alaska Autism Resources

Access Alaska

121 W. Fireweed Ln. Ste. 105

Anchorage, AK 99503

Toll Free: 800-770-4488

Fax: (907) 248-8799

E-Mail infor@accessalaska.org

Website: http://accessalaska.org

Alaska Autism Resource Center/Anchorage:

3501 Denali Street, Suite 101

Phone: (907) 334-1300/866-301-7372

E-mail: aarc@sesa.org

Website: http://alaskaarc.org/

Autism Society of Alaska

Physical Address:

59 College Road, Suite 101

Fairbanks, Alaska 99701

Mailing Address:

Autism Society of Alaska

607 Old Steese Hwy, Suite B #285

Fairbanks, Alaska 99701

Phone: 1-877-374-4421

Alaska Autism Resources Continued

Hope Community Resources, Inc.

Phone: (907) 561-5335/1-800-478-0078

Website: www.hopealaska.org/default.asp

Mailing Address:

540 W. International Airport Rd.

Anchorage, Alaska 99518

State of Alaska Health and Social Services-Autism Awareness

Phone: (907) 269-3400/800-799-7570 if calling from outside Anchorage

Fax: (907) 564-7429

E-mail: hss.autsim@alaska.gov

Website: http://www.hss.state.ak.us/autism.community.htm

Stone Soup Group

307 E. Northern Lights Blvd. Ste 100

Anchorage, AK 99503

Phone: (907) 561-3701/877-786-7327

Website: http://stonesoupgroup.org/index.html

National Resources

Autism Society of America (ASA)
4340 East-West Hwy, Suite 350
Bethesda, Maryland 20814
Phone: 301.657.0881 or 1.800.3AUTISM (1.800.328.8476)
http://www.autism-society.org

Autism Speaks
1 East 33rd Street
4th Floor
New York, NY 10016
(888) 288-4762
Email:familyservices@autismspeaks.org

Autism Research Institute (ARI)
4182 Adams Avenue
San Diego, CA 92116
(866) 366-3361
http://www.autismwebsite.com.ari/htm

Council for Exceptional Children (CEC)
2900 Crystal Drive, Suite 1000
Arlington, VA 22202
1-888-232-7733
http://www.cec.sped.org/About-Us/Contact-US/Send-Us-a-Message

Education Resources Information Center (ERIC)
http://www.eric.ed.gov

National Institute of Child Health and Human Development
PO Box 3006
Rockville, MD 20847
1-800-370-2943 (Voice - Toll-free)
1-800-505-2742 (Voice - Toll-free)
301-496-5133 (Voice)
1-866-760-5947 (FAX)
1-888-320-6942 (TTY)
www.nichd.nih.gov/
NICHDInformationResourceCenter@mail.nih.gov

The Organization for Autism Research
2000 North 14th Street, Suite 240, Arlington, VA 22201
Tel: 703.243.9710
http://www.researchautism.org/about/index.asp